### **AMENDMENTS TO THE CLAIMS**

This listing of claims will replace all prior versions and listings of claims in the application:

#### LISTING OF CLAIMS:

- 1. (original): An elongated guide wire for use in a surgical or other procedure for accessing a remote site in the body of a human or animal subject, the guide wire defining a longitudinally extending central axis, and extending axially between a distal end for accessing the remote site, and a spaced apart proximal end, a distal portion of the guide wire adjacent the distal end thereof being of substantially rectangular transverse cross-section defining a pair of spaced apart major surfaces, and a pair of spaced apart minor surfaces extending between the major surfaces, the distal portion further defining a central major plane lying intermediate the major surfaces and bisecting the minor surfaces, and a central minor plane lying intermediate the minor surfaces and bisecting the major surfaces, characterised in that the distal portion is bent into a curved configuration in the central major plane for forming an alignment portion lying in the central major plane and extending from the bend at an angle greater than zero relative to the central axis for facilitating guiding of the guide wire into a branched vessel of the subject.
- 2. (original): A guide wire as claimed in Claim 1 characterised in that the alignment portion extends relative to the central axis at an angle up to 90°.
- 3. (original): A guide wire as claimed in Claim 2 characterised in that the alignment portion extends relative to the central axis at an angle up to 60°.
- 4. (original): A guide wire as claimed in Claim 3 characterised in that the alignment portion extends relative to the central axis at an angle up to 45°.
- 5. (original): A guide wire as claimed in Claim 4 characterised in that the alignment portion extends relative to the central axis at an angle up to 30°.
- 6. (currently amended): A guide wire as claimed in Claim 1-or-2 characterised in that the alignment portion extends relative to the central axis at an angle in the range of 30° to 90°.
- 7. (currently amended): A guide wire as claimed in Claim 1 any preceding claim

characterised in that the distal portion of the guide wire is of a material for retaining the distal portion in the curved configuration formed by the bend.

- 8. (currently amended): A guide wire as claimed in <u>Claim 1 any preceding claim</u> characterised in that the distal portion of the guide wire is of dimensions for retaining the distal portion in the curved configuration formed by the bend.
- 9. (currently amended): A guide wire as claimed in <u>Claim 1 any preceding claim</u> characterised in that the distal portion of the guide wire is bendable in the central minor plane thereof for facilitating bending of the distal portion with at least a part of the alignment portion bent out of the central major plane for facilitating guiding of the guide wire into a branched vessel of the subject.
- 10. (currently amended): A guide wire as claimed in <u>Claim 1</u> any preceding claim characterised in that the distal portion of the guide wire is bendable in the central minor plane thereof for facilitating bending of the distal portion with the alignment portion bent out of the central major plane for facilitating guiding of the guide wire into a branched vessel of the subject.
- 11. (currently amended): A guide wire as claimed in Claim 9 or 10 characterised in that the distal portion of the guide wire is of material for facilitating manual bending of the distal portion in the central minor plane thereof.
- 12. (currently amended): A guide wire as claimed in any of Claims 9 to 11 characterised in that the distal portion of the guide wire is dimensioned for facilitating manual bending of the distal portion in the central minor plane thereof.
- 13. (currently amended): A guide wire as claimed in any preceding claim Claim 1 characterised in that the distal portion of the guide wire is of stainless steel material.
- 14. (currently amended): A guide wire as claimed in any preceding claim 1 characterised in that the major surfaces of the distal portion of the guide wire converge towards the distal end.
- 15. (currently amended): A guide wire as claimed in any preceding claim 1 characterised in that the minor surfaces of the distal portion of the guide wire diverge towards the distal end.

- 16. (currently amended): A guide wire as claimed in any of Claims 1-to 14 characterised in that the minor surfaces of the distal portion of the guide wire are parallel to each other.
- 17. (currently amended): A guide wire as claimed in any preceding claim Claim 1 characterised in that a reinforcing means is provided on the distal portion of the guide wire for minimising bending of the distal portion in the central minor plane thereof.
- 18. (original): A guide wire as claimed in Claim 17 characterised in that the reinforcing means extending along at least a portion of the distal portion of the guide wire from a proximal end of the distal portion.
- 19. (currently amended): A guide wire as claimed in Claim 17 or 18 characterised in that the reinforcing means extends along at least a part of the alignment portion.
- 20. (currently amended): A guide wire as claimed in any of Claims 17 to 19 characterised in that the reinforcing means terminates at a location spaced apart from the distal end of the alignment portion.
- 21. (currently amended): A guide wire as claimed in any of Claims 17-to 20 characterised in that the reinforcing means is located to coincide substantially with the central minor plane defined by the distal portion.
- 22. (currently amended): A guide wire as claimed in any of Claims 17-to 21 characterised in that the reinforcing means comprises an elongated reinforcing member extending along one of the major surfaces of the distal portion.
- 23. (currently amended): A guide wire as claimed in any preceding claim 1 characterised in that the guide wire comprises an elongated core wire extending from the proximal end to the distal portion.
- 24. (original): A guide wire as claimed in Claim 23 characterised in that the core wire terminates in the distal portion.
- 25. (original): A guide wire as claimed in Claim 24 characterised in that the distal portion of the guide wire is integrally formed with the core wire.
- 26. (currently amended): A guide wire as claimed in Claim 24-or-25 characterised in that the distal portion of the guide wire is formed from the core wire.
- 27. (original): A guide wire as claimed in Claim 24 characterised in that the distal portion of

the guide wire is formed separately from the core wire, and is secured thereto.

- 28. (currently amended): A guide wire as claimed in any of Claims 23 to 27 characterised in that the distal portion of the guide wire terminates in a bulbous portion at the distal end of the guide wire for facilitating guiding of the guide wire through vessels of the subject without damaging the vessels.
- 29. (original): A guide wire as claimed in Claim 28 characterised in that the bulbous portion is radiused.
- 30. (currently amended): A guide wire as claimed in Claim 28-or-29 characterised in that the bulbous portion defines the distal end of the guide wire and defines a hemispherical distal end.
- 31. (currently amended): A guide wire as claimed in any of Claims 28 to 30 characterised in that the guide wire comprises a sleeve extending from the bulbous portion in a proximal direction and the core wire extends through the sleeve.
- 32. (original): A guide wire as claimed in Claim 31 characterised in that the sleeve extends along the core wire in the proximal direction beyond the distal portion of the guide wire.
- 33. (currently amended): A guide wire as claimed in Claim 31 or 32-characterised in that the sleeve terminates at a location intermediate the distal portion and the proximal end of the guide wire.
- 34. (currently amended): A guide wire as claimed in any of Claims 31-to 33 characterised in that one end of the sleeve is secured to the bulbous portion of the guide wire, and the other end of the sleeve is secured to the core wire.
- 35. (currently amended): A guide wire as claimed in any of Claims 31-to 34 characterised in that the sleeve is secured to the guide wire by soldering.
- 36. (currently amended): A guide wire as claimed in-any of Claims 31-to 35 characterised in that the sleeve is of transverse cross-section, the outer periphery of which substantially coincides with the outer periphery defined by the transverse cross-section of the bulbous portion.
- 37. (currently amended): A guide wire as claimed in any of Claims 30-to-35 characterised in that the distal end of the sleeve is of a radiopaque material.
- 38. (currently amended): A guide wire as claimed in any of Claims 31 to 37 characterised in that the sleeve is of a radiopaque material.

39. (currently amended): A guide wire as claimed in any of Claims 31-to-38 characterised in that the sleeve is selected from one or more of the following metals:

platinum, platinum alloy, gold, tantalum.

- 40. (currently amended): A guide wire as claimed in any of Claims 31 to 39 characterised in that the sleeve comprises a helically wound coil.
- 41. (currently amended): A guide wire as claimed in any of Claims 31-to 40 characterised in that the sleeve comprises a tightly wound helical coil.
- 42. (currently amended): A guide wire as claimed in any of Claims 31-to 41 characterised in that the sleeve is of a plastics material.
- 43. (currently amended): A guide wire as claimed in-any of Claims 31-to-42 characterised in that the sleeve is provided in at least two longitudinally extending sections, one of which is of plastics material, and the other of a tightly wound helical coil.
- 44. (currently amended): A guide wire as claimed in any preceding claim 1 for use in accessing a remote site in the body of a human or animal subject.
- 45. (currently amended): In combination a catheter for use in a surgical or other procedure for accessing a remote site in the body of a human or animal subject, and an elongated guide wire, characterised in that the elongated guide wire is a guide wire as claimed in any preceding claim 1.
- 46. (original): In combination a catheter for use in a surgical or other procedure for accessing a remote site in the body of a human or animal subject, and an elongated guide wire, the guide wire defining a longitudinally extending central axis, and extending axially between a distal end for accessing the remote site, and a spaced apart proximal end, a distal portion of the guide wire adjacent the distal end thereof being of substantially rectangular transverse cross-section defining a pair of spaced apart major surfaces, and a pair of spaced apart minor surfaces extending between the major surfaces, the distal portion further defining a central major plane lying intermediate the major surfaces and bisecting the minor surfaces, and a central minor plane

lying intermediate the minor surfaces and bisecting the major surfaces, characterised in that the distal portion is bent into a curved configuration in the central major plane for forming an alignment portion lying in the central major plane and extending from the bend at an angle greater than zero relative to the central axis for facilitating guiding of the guide wire into a branched vessel of the subject.

47. (original): A method for forming an elongated guide wire for use in a surgical or other procedure for accessing a remote site in the body of a human or animal subject, the method comprising the steps of:

forming the distal portion of the guide wire of substantially rectangular transverse crosssection defining a pair of spaced apart major surfaces, and a pair of spaced apart minor surfaces extending between the major surfaces, the distal portion further defining a central major plane lying intermediate the major surfaces and bisecting the minor surfaces, and a central minor plane lying intermediate the minor surfaces and bisecting the major surfaces, and

bending the distal portion into a curved configuration in the central major plane for forming an alignment portion lying in the central major plane and extending from the bend at an angle greater than zero relative to the central axis for facilitating guiding of the guide wire into a branched vessel of the subject.

- 48. (original): A method as claimed in Claim 47 characterised in that the alignment portion extends relative to the central axis at an angle up to 90°.
- 49. (original): A method as claimed in Claim 48 characterised in that the alignment portion extends relative to the central axis at an angle up to 60°.
- 50. (original): A method as claimed in Claim 49 characterised in that the alignment portion extends relative to the central axis at an angle up to 45°.
- 51. (original): A method as claimed in Claim 50 characterised in that the alignment portion extends relative to the central axis at an angle up to 30°.
- 52. (currently amended): A method as claimed in Claim 47-or-48 characterised in that the alignment portion extends relative to the central axis at an angle in the range of 30° to 90°.
- 53. (currently amended): A method as claimed in <del>any of Claims 47 to 51</del> characterised in that the distal portion of the guide wire is formed from a material for retaining the distal portion in

the curved configuration formed by the bend.

- 54. (currently amended): A method as claimed in any of Claims 47 to 52 characterised in that the distal portion of the guide wire is formed of dimensions for retaining the distal portion in the curved configuration formed by the bend.
- 55. (original): A method as claimed in any of Claims 47-to 54 characterised in that the distal portion of the guide wire is bendable in the central minor plane thereof for facilitating bending of the distal portion with at least a part of the alignment portion bent out of the central major plane for facilitating guiding of the guide wire into a branched vessel of the subject.
- 56. (original): A method as claimed in Claim 55 characterised in that the distal portion of the guide wire is formed from a material for facilitating manual bending of the distal portion in the central minor plane thereof.
- 57. (currently amended): A method as claimed in Claim 55 or 56 characterised in that the distal portion of the guide wire is formed of dimensions which facilitate manual bending of the distal portion in the central minor plane thereof.
- 58. (currently amended): A method as claimed in any of Claims 47-to 57 characterised in that the distal portion of the guide wire is formed from stainless steel material.
- 59. (currently amended): A method as claimed in any of Claims 47-to 58 characterised in that the distal portion of the guide wire is formed with the major surfaces thereof converging towards the distal end.
- 60. (currently amended): A method as claimed in-any-of Claims 47-to-59 characterised in that the distal portion of the guide wire is formed with the minor surfaces thereof diverging towards the distal end.
- 61. (currently amended): A method as claimed in any of Claims 47-to 60 characterised in that a reinforcing means is provided on the distal portion of the guide wire for minimising bending of the distal portion in the central minor plane thereof.
- 62. (original): A method as claimed in Claim 61 characterised in that the reinforcing means is provided for extending along at least a portion of the distal portion of the guide wire from a proximal end of the distal portion.
- 63. (currently amended): A method as claimed in Claim 61-or 62 characterised in that the

reinforcing means is provided for extending along at least a part of the alignment portion.

- 64. (currently amended): A method as claimed in <del>any of Claims 61 to 63</del> characterised in that the reinforcing means is provided to terminate at a location spaced apart from the distal end of the alignment portion.
- 65. (currently amended): A method as claimed in any of Claims 61 to 64 characterised in that the reinforcing means is located to coincide substantially with the central minor plane defined by the distal portion.
- 66. (currently amended): A method as claimed in-any-of Claims 61-to-65 characterised in that the reinforcing means is provided by an elongated reinforcing member extending along one of the major surfaces of the distal portion.
- 67. (currently amended): A method as claimed in any of Claims 47-to-66 characterised in that the guide wire is formed with an elongated core wire extending from the proximal end to the distal portion.
- 68. (original): A method as claimed in Claim 67 characterised in that the distal portion of the guide wire is integrally formed with the core wire.
- 69. (currently amended): A method as claimed in Claim 67-or-68 characterised in that the distal portion of the guide wire is formed from the core wire.
- 70. (original): A method as claimed in Claim 67 characterised in that the distal portion of the guide wire is formed separately from the core wire, and is secured thereto.
- 71. (currently amended): A method as claimed in any of Claims 67 to 70 characterised in that the distal portion of the guide wire is terminated in a bulbous portion at the distal end of the guide wire for facilitating guiding of the guide wire through vessels of the subject without damaging vessels.
- 72. (original): A method as claimed in Claim 71 characterised in that the bulbous portion is radiused.
- 73. (currently amended): A method as claimed in Claim 71 or 72 characterised in that the bulbous portion of the guide wire defines the distal end of the guide wire and defines a spherical distal end.
- 74. (currently amended): A method as claimed in any of Claims 71 to 73 characterised in

that a sleeve is provided extending from the bulbous portion in a proximal direction along the guide wire, and the core wire extends through the sleeve.

- 75. (original): A method as claimed in Claim 74 characterised in that the sleeve terminates at a location intermediate the distal portion and the proximal end of the guide wire.
- 76. (new): An elongated guide wire for use in a surgical or other procedure for accessing a remote site in the body of a human or animal subject, the guide wire defining a longitudinally extending central axis, and extending axially between a distal end for accessing the remote site, and a spaced apart proximal end, a distal portion of the guide wire adjacent the distal end thereof being of substantially rectangular transverse cross-section defining a pair of spaced apart major surfaces, and a pair of spaced apart minor surfaces extending between the major surfaces, the distal portion further defining a central major plane lying intermediate the major surfaces and bisecting the minor surfaces, and a central minor plane lying intermediate the minor surfaces and bisecting the major surfaces, wherein the distal portion is bent into a curved configuration in the central major plane for forming an alignment portion lying in the central major plane and extending from the bend at an angle greater than zero relative to the central axis for facilitating guiding of the guide wire into a branched vessel of the subject.
- 77. (new): A guide wire as claimed in Claim 76 in which the alignment portion extends relative to the central axis at an angle up to 90°, and preferably, the alignment portion extends relative to the central axis at an angle up to 60°, and advantageously, the alignment portion extends relative to the central axis at an angle up to 45°, and preferably, the alignment portion extends relative to the central axis at an angle up to 30°, and advantageously, the alignment portion extends relative to the central axis at an angle in the range of 30° to 90°.
- 78. (new): A guide wire as claimed in Claim 76 in which the distal portion of the guide wire is of a material for retaining the distal portion in the curved configuration formed by the bend, and preferably, the distal portion of the guide wire is of dimensions for retaining the distal portion in the curved configuration formed by the bend, and advantageously, the distal portion of the guide wire is bendable in the central minor plane thereof for facilitating bending of the distal portion with at least a part of the alignment portion bent out of the central major plane for

facilitating guiding of the guide wire into a branched vessel of the subject, and preferably, the distal portion of the guide wire is bendable in the central minor plane thereof for facilitating bending of the distal portion with the alignment portion bent out of the central major plane for facilitating guiding of the guide wire into a branched vessel of the subject, and advantageously, the distal portion of the guide wire is of material for facilitating manual bending of the distal portion in the central minor plane thereof, and preferably, the distal portion of the guide wire is dimensioned for facilitating manual bending of the distal portion in the central minor plane thereof, and advantageously, the distal portion of the guide wire is of stainless steel material.

- 79. (new): A guide wire as claimed in Claim 76 in which the major surfaces of the distal portion of the guide wire converge towards the distal end.
- 80. (new): A guide wire as claimed in Claim 76 in which the minor surfaces of the distal portion of the guide wire diverge towards the distal end, and alternatively, the minor surfaces of the distal portion of the guide wire are parallel to each other.
- 81. (new): A guide wire as claimed in Claim 76 in which a reinforcing means is provided on the distal portion of the guide wire for minimising bending of the distal portion in the central minor plane thereof, and preferably, the reinforcing means extending along at least a portion of the distal portion of the guide wire from a proximal end of the distal portion, and preferably, the reinforcing means extends along at least a part of the alignment portion, and advantageously, the reinforcing means terminates at a location spaced apart from the distal end of the alignment portion, and preferably, the reinforcing means is located to coincide substantially with the central minor plane defined by the distal portion, and advantageously, the reinforcing means comprises an elongated reinforcing member extending along one of the major surfaces of the distal portion.
- 82. (new): A guide wire as claimed in Claim 76 in which the guide wire comprises an elongated core wire extending from the proximal end to the distal portion, and preferably, the core wire terminates in the distal portion, and preferably, the distal portion of the guide wire is integrally formed with the core wire, and advantageously, the distal portion of the guide wire is formed from the core wire, and alternatively, the distal portion of the guide wire is formed separately from the core wire, and is secured thereto, and preferably, the distal portion of the guide wire terminates in a bulbous portion at the distal end of the guide wire for facilitating

guiding of the guide wire through vessels of the subject without damaging the vessels, and advantageously, the bulbous portion is radiused, and preferably, the bulbous portion defines the distal end of the guide wire and defines a hemispherical distal end.

- 83. (new): A guide wire as claimed in Claim 82 in which the guide wire comprises a sleeve extending from the bulbous portion in a proximal direction and the core wire extends through the sleeve, and preferably, the sleeve extends along the core wire in the proximal direction beyond the distal portion of the guide wire, and advantageously, the sleeve terminates at a location intermediate the distal portion and the proximal end of the guide wire, and preferably, one end of the sleeve is secured to the bulbous portion of the guide wire, and the other end of the sleeve is secured to the core wire, and advantageously, the sleeve is secured to the guide wire by soldering, and preferably, the sleeve is of transverse cross-section, the outer periphery of which substantially coincides with the outer periphery defined by the transverse cross-section of the bulbous portion.
- 84. (new): A guide wire as claimed in Claim 82 in which the distal end of the sleeve is of a radiopaque material, and preferably, the sleeve is of a radiopaque material, and preferably, the sleeve is selected from one or more of the following metals:

platinum, platinum alloy, gold, tantalum.

- 85. (new): A guide wire as claimed in Claim 83 in which the sleeve comprises a helically wound coil, and preferably, the sleeve comprises a tightly wound helical coil, and advantageously, the sleeve is of a plastics material, and preferably, the sleeve is provided in at least two longitudinally extending sections, one of which is of plastics material, and the other of a tightly wound helical coil, and preferably, the guide wire is adapted for use in accessing a remote site in the body of a human or animal subject.
- 86. (new): In combination a catheter for use in a surgical or other procedure for accessing a remote site in the body of a human or animal subject, and an elongated guide wire, characterised in that the elongated guide wire is a guide wire as claimed in Claim 1.

- 87. (new): In combination a catheter for use in a surgical or other procedure for accessing a remote site in the body of a human or animal subject, and an elongated guide wire, the guide wire defining a longitudinally extending central axis, and extending axially between a distal end for accessing the remote site, and a spaced apart proximal end, a distal portion of the guide wire adjacent the distal end thereof being of substantially rectangular transverse cross-section defining a pair of spaced apart major surfaces, and a pair of spaced apart minor surfaces extending between the major surfaces, the distal portion further defining a central major plane lying intermediate the major surfaces and bisecting the minor surfaces, and a central minor plane lying intermediate the minor surfaces and bisecting the major surfaces, characterised in that the distal portion is bent into a curved configuration in the central major plane for forming an alignment portion lying in the central major plane and extending from the bend at an angle greater than zero relative to the central axis for facilitating guiding of the guide wire into a branched vessel of the subject.
- 88. (new): A method for forming an elongated guide wire for use in a surgical or other procedure for accessing a remote site in the body of a human or animal subject, the method comprising the steps of:

forming the distal portion of the guide wire of substantially rectangular transverse crosssection defining a pair of spaced apart major surfaces, and a pair of spaced apart minor surfaces extending between the major surfaces, the distal portion further defining a central major plane lying intermediate the major surfaces and bisecting the minor surfaces, and a central minor plane lying intermediate the minor surfaces and bisecting the major surfaces, and

bending the distal portion into a curved configuration in the central major plane for forming an alignment portion lying in the central major plane and extending from the bend at an angle greater than zero relative to the central axis for facilitating guiding of the guide wire into a branched vessel of the subject.

89. (new): A method as claimed in Claim 88 in which the alignment portion extends relative to the central axis at an angle up to 90°, and preferably, the alignment portion extends relative to the central axis at an angle up to 60°, and advantageously, the alignment portion extends relative to the central axis at an angle up to 45°, and preferably, the alignment portion extends relative to

the central axis at an angle up to 30°, and advantageously, the alignment portion extends relative to the central axis at an angle in the range of 30° to 90°.

- 90. (new): A method as claimed in Claim 88 in which the distal portion of the guide wire is formed from a material for retaining the distal portion in the curved configuration formed by the bend, and preferably, the distal portion of the guide wire is formed of dimensions for retaining the distal portion in the curved configuration formed by the bend.
- 91. (new): A method as claimed in Claim 88 in which the distal portion of the guide wire is bendable in the central minor plane thereof for facilitating bending of the distal portion with at least a part of the alignment portion bent out of the central major plane for facilitating guiding of the guide wire into a branched vessel of the subject, and preferably, the distal portion of the guide wire is formed from a material for facilitating manual bending of the distal portion in the central minor plane thereof, and advantageously, the distal portion of the guide wire is formed of dimensions which facilitate manual bending of the distal portion in the central minor plane thereof, and preferably, the distal portion of the guide wire is formed from stainless steel material.
- 92. (new): A method as claimed in Claim 88 in which the distal portion of the guide wire is formed with the major surfaces thereof converging towards the distal end.
- 93. (new): A method as claimed in Claim 88 in which the distal portion of the guide wire is formed with the minor surfaces thereof diverging towards the distal end.
- 94. (new): A method as claimed in Claim 88 in which a reinforcing means is provided on the distal portion of the guide wire for minimising bending of the distal portion in the central minor plane thereof, and preferably, the reinforcing means is provided for extending along at least a portion of the distal portion of the guide wire from a proximal end of the distal portion, and advantageously, the reinforcing means is provided for extending along at least a part of the alignment portion, and preferably, the reinforcing means is provided to terminate at a location spaced apart from the distal end of the alignment portion, and advantageously, the reinforcing means is located to coincide substantially with the central minor plane defined by the distal portion, and preferably, the reinforcing means is provided by an elongated reinforcing member extending along one of the major surfaces of the distal portion.

95. (new): A method as claimed in Claim 88 in which the guide wire is formed with an elongated core wire extending from the proximal end to the distal portion, and preferably, the distal portion of the guide wire is integrally formed with the core wire, and advantageously, the distal portion of the guide wire is formed from the core wire, and alternatively, the distal portion of the guide wire is formed separately from the core wire, and is secured thereto, and preferably, the distal portion of the guide wire is terminated in a bulbous portion at the distal end of the guide wire for facilitating guiding of the guide wire through vessels of the subject without damaging vessels, and preferably, the bulbous portion is radiused, and preferably, the bulbous portion of the guide wire defines the distal end of the guide wire and defines a spherical distal end, and advantageously, a sleeve is provided extending from the bulbous portion in a proximal direction along the guide wire, and the core wire extends through the sleeve, and preferably, the sleeve terminates at a location intermediate the distal portion and the proximal end of the guide wire.